Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): ~~Method~~ A method of management in a circuit-switched communication network (1), the method being performed on, or with the aid of, at least one programmable device (10) connected to said network, ~~characterised by the~~ comprising:

~~step of~~ computing (202) and storing (203) in an electronic memory (1018, 1020) a representation of the network based on B-blocking islands (N_i),

each B-blocking island ~~consisting of~~ comprising:

a maximal set of nodes (A-G) linked in a such a way that at least one route with at least an amount B of concave resources exists between any pair of nodes in the set at the time t.

Claim 2 (Currently Amended): Method according to Claim 1, further comprising:

~~the step of organising~~ organizing said Bi-blocking islands (N_i) in a hierarchy, wherein ~~the~~ a hierarchical position of each B_i-blocking island depends on the choice of the value B_i used for defining said blocking island.

Claim 3 (Original): Method according to Claim 2, wherein said values B_i used for defining the blocking island hierarchy are predefined according to common resources requirements.

Claim 4 (Currently Amended): Method according to Claim 3, further comprising:

~~the step of~~ changing dynamically said values B_i used for defining the blocking island hierarchy.

Claim 5 (Currently Amended): Method according to one of the claims 2, further comprising:

~~the step of~~ dynamically merging at ~~at~~ least one hierarchical level two B-blocking islands when deallocation of an established circuit in said network (1) has freed enough resources on a link (I_i) between said two B-blocking islands (N_i) such that at least an amount B of resources is available on said link (I_i).

Claim 6 (Currently Amended): Method according to one of the claims 2, further comprising:

~~the step of~~ dynamically splitting at ~~at~~ least one hierarchical level a B-blocking island (N_i) when establishment of a new circuit using at least one link between two nodes inside said B-blocking island uses too many resources to allow a route with at least an amount B of resources between any pair of nodes inside said B-blocking island.

Claim 7 (Currently Amended): Method according to one of the claims 2, further comprising:

~~the step of~~ updating said B-blocking island hierarchy in the case of rerouting of demands, link failure or link removal, alteration of the properties of a link, adding of a link, node failure, node removal or node addition.

Claim 8 (Currently Amended): Method according to one of the claim 1, said method ~~being used for finding~~configured to find a path between at least two nodes (A-G) in a circuit-switched communication network (1) with at least an amount b of resources available, ~~the~~a search of said path being confined to a B-blocking island comprising at least two said nodes, and B being bigger than b.

Claim 9 (Currently Amended): Method according to Claim 8, further comprising:

~~the step of~~ selecting the most suitable path by ~~analysing~~analyzing the impact each path has on the structure of blocking islands hierarchy.

Claim 10 (Currently Amended): Method according to claim 8, further comprising:

~~the step of~~selecting the most suitable path by comparing at which level of the B-blocking island hierarchy each route appears.

Claim 11 (Currently Amended): Method according to the claim 8, wherein ~~the~~search space for a demand of the routing algorithm is reduced to the subnetwork ~~summarised~~summarized by the B-blocking island with ~~a~~the greatest predefined B that contains the endpoints of said demand.

Claim 12 (Currently Amended): Method according to claim 2, said method ~~being used for rerouting~~configured to reroute connections that use more critical links at level B_i of the hierarchy than necessary (zig-zag connections).

Claim 13 (Currently Amended): Method according to claim 2, said method ~~being used for determining~~configured to determine the price of a communication, said price being

dependent at least partially on the hierarchical level of the links (I_i) used by the circuit established for the communication in said hierarchy of B-blocking islands.

Claim 14 (Currently Amended): Method according to claim 2, said method ~~being used for analysing~~configured to analyze the ~~behaviour~~behavior of an existing circuit-switched communication network or planning the construction of a new circuit-switched communication network or the modification of an existing circuit-switched communication network.

Claim 15 (Currently Amended): Method according to one of the claim 1, said method being based on a hierarchy of autonomous intelligent agents, each agent being responsible for a set of nodes in said circuit-switched communication network, with higher level agents arbitrating conflicts between peer agents, each agent being responsible for a dynamically defined set of nodes (N_i) consisting of nodes linked in a such a way that at least a route with at least an amount B of concave resources ~~exist~~exists between any pair of nodes in the set at the time t, and ~~the~~a level of the agents in said hierarchy ~~being~~are dependent on ~~the~~a choice of the value B used for defining said set of nodes.

Claim 16 (Currently Amended): Method according to Claim 15, said method ~~being used for routing~~configured to route demands between at least two nodes in a circuit-switched communication network (1), and comprising the following steps undertaken when a new demand arises issued by a network node x which needs to communicate with at least one other node y, an amount B of resources being requested for that communication:

first the node x asks the agent responsible for the node x with the lowest level in the hierarchy of agents to establish a circuit for said new demand,

said agent passes on this demand to the agent at the next level in the hierarchy,

until the agent at the level B is reached, which then finds a route between x and y and

establishes the circuit.

Claim 17 (Currently Amended): Method according to Claim 15, said method ~~being used for determining~~configured to determine ~~the~~a price of a communication, said price being

dependent at least partially on the hierarchical level of the links (I_i) used by the circuit

established for the communication in said hierarchy of blocking islands.

Claim 18 (Previously Presented): Method according to Claim 1, wherein said

resource used for determining the nodes belonging to the same B-blocking island is the

bandwidth.

Claim 19 (Previously Presented): Method according to Claim 1, performed on a

central hardware and software management platform (10).

Claim 20 (Previously Presented): Method according to Claim 1, performed by

distributed communication and/or terminal nodes in the network.

Claim 21 (Previously Presented): Method according to Claim 1, wherein said circuit-

switched communication network (1) is an ATM network.

Claim 22 (Original): Method according to Claim 21, said method being used for a

connection admission control function (CAC) in an ATM switch (10), the routing module of

the connection admission control employing a blocking island hierarchy.

Claim 23 (Previously Presented): Method according to Claim 1, wherein said circuit-switched communication network (1) is a SDH network.

Claim 24 (Previously Presented): Method according to Claim 1, wherein said circuit-switched communication network (1) is a RSVP and TCP/IP network.

Claim 25 (Previously Presented): Method according to Claim 1, wherein said circuit-switched communication network (1) is a TDM network.

Claim 26 (Currently Amended): ~~Device~~ A device (10) which can be used as a terminal node or as a communication node in a circuit-switched communication network (1), ~~characterised by~~comprising:

means (1016, 1018, 1020) for computing a representation of the network based on B-blocking islands (N_i), each B-blocking island ~~consisting of~~comprising a maximal set of concave nodes linked in a such a way that at least one route with at least an amount B of resources exists between any pair of nodes in the set at the time ~~t,~~ ; and

~~storing~~ means (1018, 1020) for storing said representation.

Claim 27 (Currently Amended): Device according to Claim 26, further comprising:

means for ~~organising~~organizing said B-blocking islands (N_i) in a hierarchy, wherein the hierarchical position of each B_i-blocking island depends on the choice of the value B_i used for defining said blocking island.

Claim 28 (Original): Device according to Claim 27, wherein said values Bi used for defining the blocking island hierarchy are predefined according to common resources requirements.

Claim 29 (Currently Amended): Device according to Claim 28, further comprising:

means for dynamically changing said values B_i used for defining the blocking island hierarchy.

Claim 30 (Currently Amended): Device according to claim 26, further comprising:

means for dynamically merging at-at least one hierarchical level two B-blocking islands (N_i) when deallocation of an established circuit in said network has freed enough resources on a link (I_i) between said two B-blocking islands such that at least an amount B of resources is available on said link (I_i).

Claim 31 (Currently Amended): Device according to claim 26, further comprising:

means for dynamically splitting at least one hierarchical level a B-blocking island when establishment of a new circuit using at least one link between two nodes inside said B-blocking island uses too many resources to allow a route with at least an amount B of resources between any pair of nodes inside said B-blocking island.

Claim 32 (Currently Amended): Device according to claim 26, further comprising:

means for updating said B-blocking island hierarchy in the case of rerouting of demands, link failure or link removal, alteration of the properties of a link, adding of a link, node failure, node removal or node addition.

Claim 33 (Currently Amended): Device according to claim 26, further comprising:

routing means for finding a path between at least two nodes (A-G) in said circuit-switched communication network (1) with at least an amount b of resources available, wherein said routing means use said storing means to confine the search of said path to a B-blocking island comprising at least two said nodes, B being bigger than b.

Claim 34 (Currently Amended): Device according to Claim 33, further comprising:

means for selecting the most suitable path by ~~analysing~~analyzing the impact each path has on the structure of the blocking islands hierarchy.

Claim 35 (Currently Amended): Device according to claim 33, further comprising:

means for selecting the most suitable path by comparing at which level of the B-blocking island hierarchy each route appears.

Claim 36 (Currently Amended): Device according to the claim 33, further comprising:

means for reducing the search space for a demand of the routing algorithm to the subnetwork ~~summarised~~summarized by the B-blocking island with the greatest predefined B that contains the endpoints of said demand.

Claim 37 (Currently Amended): Device according to claim 26, said device being a price determination device ~~used for determining~~configured to determine the price of a communication, wherein said price depends at least partially on the hierarchical level of the links (l_i) used by the circuit established for the communication in said hierarchy of blocking islands.

Claim 38 (Currently Amended): Device according to claim 26, said device being a network planning tool ~~that can be used for analysing~~configured to analyze the ~~behaviour~~behavior of an existing circuit-switched communication network or planning the construction of a new circuit-switched communication network and the modification of an existing circuit-switched communication network.

Claim 39 (Currently Amended): Device according to claim 26, further comprising: means (1021) to connect it to said circuit-switched communication network (1).

Claim 40 (Original): Device according to Claim 39, being a central hardware and software management platform in a circuit-switched communication network (1).

Claim 41 (Original): Device according to Claim 39, being a local terminal or communication node in a circuit-switched communication network (1) with distributed management.

Claim 42 (Currently Amended): Device according to Claim 41, wherein said distributed management is based on a hierarchy of autonomous intelligent agents, each agent being implemented in a local master, node responsible for a dynamically defined set of nodes in said circuit-switched communication network, wherein higher level agents arbitrate conflicts between peer agents, each agent being responsible for a dynamically defined set of nodes (N_i) ~~consisting of~~comprising nodes linked in a such a way that at least a route with at least an amount B of concave resources exist between any pair of nodes in the set at the time

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t, and in that the level of each agent in said hierarchy, depends on the choice of the value

Bused for defining said set of nodes.

Claim 43 (Previously Presented): Device according to Claim 26, wherein said circuit-switched communication network (1) is an ATM-network.

Claim 44 (Previously Presented): Device according to Claim 26, wherein said circuit switched communication network (1) is a SDH network.

Claim 45 (Previously Presented): Device according to Claim 26, wherein said circuit switched communication network (1) is a RSVP and TCP/IP network.

Claim 46 (Previously Presented): Device according to Claim 26, wherein said circuit-switched communication network (1) is a TDM network.

Claim 47 (Currently Amended): Device according to claim 26, wherein ~~said~~ a resource ~~used for determining the~~configured to determine nodes belonging to the same B-blocking island is ~~the~~ a bandwidth.

Claim 48 (Currently Amended): ~~Planning~~ A planning method for circuit-switched communication network (1), the method being performed on or with the aid of at least a programmable device (101) storing a representation of said network, ~~characterised by the step of~~comprising:

computing and storing in an electronic memory (1018, 1020) a representation of the network (1) based on B-blocking islands (N_i), each B-blocking island ~~consisting~~

~~of~~comprising a maximal set of nodes linked in a such a way that at least a route with at least

an amount B of concave resources exist between any pair of nodes in the set.

Claim 49 (Currently Amended): Planning method according to Claim 48, further

comprising: ~~the step of~~

~~organising~~organizing said B-blocking islands in a hierarchy wherein the hierarchical

position of each B-blocking island depends on the choice of the value B used for defining

said B-blocking island.

Claim 50 (Currently Amended): Planning method according to claim 48, further

comprising:

the step of graphically displaying on a display (1014) connected to said

programmable device (101) a ~~summarised~~summarized representation of said network.

Claim 51 (Currently Amended): Planning method according to Claim 50, further

comprising: ~~the step of~~

graphically highlighting on said display (1014) critical links between said blocking

islands.

Claim 52 (Currently Amended): Network planning tool (101) ~~that can be used for~~

~~analysing the behaviour~~configured to analyze a behavior of an existing circuit-switched

communication network (1) and/or for planning modification of an existing network, said

network planning tool comprising:

processing means (1016)[[,]] ;

storing means (1018, 1020);

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display means (1014)[[,]] ;

program code means for causing said processing means (1016) to compute, from a

representation of the topology of the network and from a set of demands, a

~~summarised~~summarized representation of the state of said network at a time t, wherein

said ~~summarised~~summarized representation ~~summarises~~summarizes [the] available

resources by grouping at least some ~~of the~~ nodes of said network into a plurality of B-

blocking islands (N_i), each B-blocking island ~~consisting of~~comprising a set of nodes linked in

a such a way that at least one route with at least an amount B of resources exists between any

pair of nodes in the set at the time t[[,]] ; and

program code means (1011) for causing said processing means (1016) to store in said

storing means (1018, 1020) and to display on said display means (1014) said

~~summarised~~summarized representation.

Claim 53 (Currently Amended): ~~Device~~ A device (10) ~~which can be used~~configured

as a terminal node or as a communication node in a circuit-switched communication network

(1), ~~characterised by~~comprising:

means for computing, means for storing, and means for updating at least a part of a B-

blocking island hierarchy, ~~a~~said B-blocking island ~~consisting of~~comprising a maximal set of

concave nodes linked in a such a way that at least one route with at least an amount B of

resources exists between any pair of nodes, in the set at the time t, and the position of each B-

blocking island in ~~a~~said B-blocking island hierarchy being dependent on the choice of the

value B_i used for defining said blocking island.

Claim 54 (Previously Presented): A program storage device (1011) readable by a programmable apparatus (101) and configured in such a way that it causes said programmable apparatus (101) to perform the method according to Claim 1.

Claim 55 (Previously Presented): A program storage device (1011) according to Claim 54, wherein said programmable apparatus (101) is a device according to Claim 26.

Claim 56 (Previously Presented): Circuit-switched communication network (1) comprising at least one device (10) according to Claim 26.

Claim 57 (Previously Presented): A program storage device (1011) readable by a computer and configured in such a way that it causes said computer to perform the method according to Claim 48.

Claim 58 (Currently Amended): A processor readable medium (1011) which is configured in such a way that it causes a programmable device (10) to compute, store and update at least a part of a blocking island hierarchy, a said B-blocking island consisting ofcomprising a maximal set of concave nodes linked in a such a way that at least one route with at least an amount B of resources exists between any pair of nodes in the set at the time t, and the position of each B-blocking island in a said B-blocking island hierarchy being dependent on the choice of the value B, used for defining said blocking island.